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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,789	11/30/2001	Dorron Levy	Q66130	4578
23373	7590	03/31/2004	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			WACHSMAN, HAL D	
			ART UNIT	PAPER NUMBER
			2857	

DATE MAILED: 03/31/2004

Please find below and/or attached an Office communication concerning this application or proceeding.



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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
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EXAMINER
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ART UNIT	PAPER
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Commissioner for Patents

Hal D Wachsman  
Primary Examiner  
Art Unit: 2857

<b>Office Action Summary</b>	<b>Application No.</b> 09/996,789	<b>Applicant(s)</b> LEVY ET AL.	
	<b>Examiner</b> Hal D Wachsman	<b>Art Unit</b> 2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 3-16 and 22-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 17-21 and 36-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 January 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

1. Claims 3-16 and 22-35 were withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species in which the election was made **without** traverse. The withdrawn claims have not been cancelled and there are no allowable generic claims. Appropriate correction is required.

2. Claims 20, 21, 36 and 37 are objected to under 37 C.F.R. 1.75(a) for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Amended claim 20, line 4, now states "comparing said disorder indicator with a statistical description of idealized behavior" however idealized behavior of what exactly is being referred to here ? The examiner asks the applicant to better claim the limitations cited above. While the examiner understands the intentions of the applicant he feels confusion could be drawn from the limitations cited above. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1, 2, 17-21 and 36-40 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the

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application was filed, had possession of the claimed invention. Independent claims 1, 19, 20 and 38-40 were amended to contain the limitation "...wherein the disorder indicator represents a non-designated output of said system" which was not described in the specification in such a way to clearly show that at the time the application was filed, the inventors had possession of this now claimed invention and thus what has been added to the claims now constitutes new matter.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 2, 17-21 and 36-39 are rejected under 35 U.S.C. 102(b) as being anticipated by White et al. (5,586,066).

As per claim 1, White et al. (Abstract, col. 113 lines 2-10) disclose a measurement unit for repeatedly measuring a disorder indicator (the sensed industrial process data corresponding to the operational state of the industrial process system or sensors monitoring the process) of the system. White et al. (Abstract, figures 3D, 3E col. 10 lines 4-7, col. 113 lines 14-28) disclose "a comparator for comparing obtained measurements of said disorder indicator with a predetermined statistical description of

said disorder indicator to determine whether a deviation.....to issue a failure prediction upon determination that such a deviation is statistically significant”.

As per claim 2, White et al. (col. 10 lines 11-12) indicate that the industrial system can include a nuclear power station and col. 116 lines 15-17 indicate that an alarm is generated for at least one of an automated response by a device operating the industrial process or a manual response by an operator. It is inherent in the art that in a nuclear power plant, because of the radiation hazard in the reactor compartment, many sensors and alarms would need to be monitored remotely by the operator in the control room necessitating the communication link cited in the claim.

As per claim 17, White et al. (Abstract, figure 2, col. 4 lines 3-5, col. 10 lines 4-7, col. 116 lines 14-17) disclose the feature of this claim.

As per claim 18, White et al. (col. 10 lines 7-18) disclose the feature of this claim.

As per claim 19, White et al. (Abstract, col. 113 lines 2-10) disclose a measurement unit for repeatedly measuring a disorder indicator (the sensed industrial process data corresponding to the operational state of the industrial process system or sensors monitoring the process) of the system. White et al. (Abstract, figures 2, 3D, 3E col. 10 lines 4-7, col. 113 lines 14-28) disclose “a statistical unit for building up a statistical description of said disorder indicator...during a training phase of operation of said system”. White et al. (Abstract, figure 3D, col. 10 lines 4-7, columns 13 and 14, last paragraph, col. 114 lines 10-24) disclose “a system thresholder, for using said statistical description....to predict system failure”.

As per claim 20, White et al. (Abstract, col. 113 lines 2-10) disclose the repeatedly measuring step. White et al. (Abstract, figures 3D, 3E col. 10 lines 4-7, col. 113 lines 14-28) disclose both the comparing and determining steps. White et al. (Abstract, col. 10 lines 4-7) disclose the issuing an alert step.

As per claim 21, White et al. (col. 10 lines 11-12) indicate that the industrial system can include a nuclear power station and col. 116 lines 15-17 indicate that an alarm is generated for at least one of an automated response by a device operating the industrial process or a manual response by an operator. It is inherent in the art that in a nuclear power plant, because of the radiation hazard in the reactor compartment, many sensors and alarms would need to be measured remotely by the operator.

As per claim 36, White et al. (Abstract, figure 2, col. 4 lines 3-5, col. 10 lines 4-7, col. 116 lines 14-17) disclose the feature of this claim.

As per claim 37, White et al. (col. 10 lines 7-18) disclose the feature of this claim.

As per claim 38, White et al. (Abstract, col. 113 lines 2-10) disclose both the selecting and repeatedly measuring steps. White et al. (Abstract, col. 3 lines 55-67) disclose the obtaining step. White et al. (Abstract, figures 3D, 3E col. 10 lines 4-7, col. 113 lines 14-28) disclose both the comparing and determining steps. White et al. (Abstract, col. 10 lines 4-7) disclose the issuing an alert step.

As per claim 39, White et al. (Abstract, col. 113 lines 2-10) disclose a measurement unit for repeatedly measuring a disorder indicator (the sensed industrial

process data corresponding to the operational state of the industrial process system or sensors monitoring the process) of an external system. White et al. (Abstract, figures 3D, 3E col. 10 lines 4-7, col. 113 lines 14-28) disclose "a comparator for comparing obtained measurements of said disorder indicator with a predetermined statistical description of said disorder indicator to determine whether a deviation.....to issue a failure prediction upon determination that such a deviation is statistically significant".

7. Claim 40 is rejected under 35 U.S.C. 102(b) as being anticipated by Rauscher (5,655,074).

As per claim 40, Rauscher (Abstract, figure 1, col. 4 lines 2-11, col. 8 lines 61, 62) discloses a measurement unit for repeatedly measuring a disorder indicator (the measured attributes for each of the components of the software) of a system. Rauscher (Abstract, col. 3 lines 15-23, col. 4 lines 21-50, col. 5 lines 13-28, col. 6 lines 1-23, 50-55, 62-64, col. 7 lines 53-66) discloses "a comparator for comparing obtained measurements of said disorder indicator with a predetermined statistical description of said disorder indicator.....said apparatus being operable to issue a quality score of said software based on an extent of said deviation".

8. Applicant's arguments filed 1-2-04 have been fully considered but they are not persuasive. First, as shown above a new grounds of rejection under 35 U.S.C. 112 first paragraph has been applied necessitated by the Applicant's amendments. In addition, on page 15 of the reply the Applicant argues with respect to the White et al. reference that:



“Accordingly, as White only discloses the measurement of designated outputs (i.e., output planned for a system), Applicant submits that White fails to disclose a measurement unit that measures a disorder indicator, the disorder indicator representing a non-designated output of a system, as set forth in claim 1. In White, non-designated outputs of an industrial process being monitored would not be gathered by sensors 16 but would simply be disregarded.”

However, if we turn to page 10, lines 29-31, of the specification of the instant application, that states:

“Preferably, the measurement unit uses only routine data traffic in order to gather sufficient information for regular monitoring of a disorder indicator.”

The Examiner respectfully notes a sensor such as used in White et al. is one type of “measurement unit” and the fact that “only **routine** data traffic” is being used by the measurement unit would clearly imply that a designated output such as being argued by the Applicant as being done in White et al. is also being done in the instant application. Then, if we look further at page 15, lines 7-9, of the specification of the instant application, that states:

“Another widely applicable disorder indicator is sound or vibration in particular sound emitted by a system. Often sound is used by engineers to get a feel for the presence of a problem, particularly in a mechanical system.”

If we now turn to White et al. (col. 10 lines 11-17) that states:

“The industrial system 14 can include without limitation a nuclear power station, fossil power stations, automobiles, aircraft, ..manufacturing lines, pumping stations.....”

It is clear to see from the above that the wide variety of industrial systems being cited certainly include mechanical systems in which just as in the instant application there would be a desirability to monitor the sound or vibration disorders because, it was known as stated by the Applicant above, that often sound is used by engineers to get a feel for the presence of a problem.

On page 16 of the reply with respect to the Rauscher reference, the Applicant argues that "Therefore, as Rauscher only discloses the measurement of designated outputs (i.e., specific faults and problems associated with a particular software component), Applicant submits that Rauscher fails to disclose a measurement unit that measures a disorder indicator, the disorder indicator representing a non-designated output of a system, as set forth in claim 40." However, with respect to "the disorder indicator representing a non-designated output of a system" as already shown in paragraph 4 above, a new matter limitation is being argued here and the Examiner respectfully notes that the reply did not point out where and why in the specification the Applicant believes there is support for this added limitation.

9. No claims are allowed.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

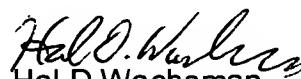
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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hal D Wachsman whose telephone number is 571-272-2225. The examiner can normally be reached on Monday to Friday 7:00 A.M. to 4:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on 571-272-2216. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Hal D Wachsman  
Primary Examiner  
Art Unit 2857

HW  
March 26, 2004